IT Infrastructure Partnership Program

Fred Duball and Joe Fay
Program Directors

April 18, 2007
**ITIB Infrastructure Committee Briefing**

Agenda

- Service Delivery

- Transformation

- Customer Satisfaction

- ITP Financials

- Independent Verification & Validation

Executive Summary

- Transformation is underway

  - Global address list synchronization completed – foundational to enterprise messaging

  - Desktop refresh complete at four pilot agencies and expanding to phase 1 agencies - establishing momentum for the enterprise

  - Peregrine rollout at VCCC and DMHMRSAS – cornerstone toolset for enterprise help desk

- The customer's experience and satisfaction is at the forefront of all partnership program activities

- Partnership finances continue to be managed closely

Service Delivery
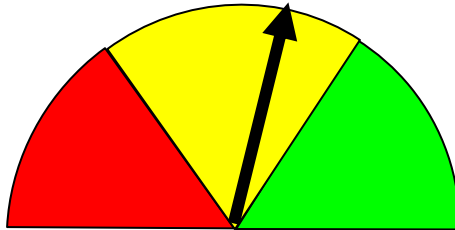
Current Operations Dashboard

Central Metrics

	Jan	Feb	Mar
G	100%	100%	92.9%
Y	0%	0%	0%
R	0%	0%	7.1%

Agency Metrics

	Jan	Feb	Mar
G	87.3%	90.4%	92.8%
Y	2.9%	3.2%	1.0%
R	9.8%	6.4%	6.3%

Other Influencing Factors

Title	Description	Remedy
Cannot provide consistent superior service across the enterprise	Combining agency IT departments resulted in non-standard systems and processes	Standardization being pursued, but transformed systems are required to provide consistent enterprise service
Service Delivery must assimilate Transformed projects	Transformation projects will be moved to Service Delivery incrementally	Work with Transformation to plan the incremental rollout of transformed projects

IT Infrastructure Services – March 2007

Domain	Area	Central			Field			Post Transform
		Coverage	Measures	Perf	Coverage	Measures	Perf G/Y/R	Contract SLAs
End User Services	Help Desk	41%	5	🟥	31%	5	26/1/5	19
	Messaging	21%	2	🟩	50%	1	20/0/0	10
	Desktop	13%	3	🟩	58%	3	53/1/8	14
Data Center Services	Server	16%	2	🟩	53%	6	93/0/0	21
	Mainframe	100%	2	🟩				13
Network Services	Data	90%	1	🟩				25
	Voice	0%	0					19
Security Services	Security	100%	2	🟩				9

Central Operations Measures

Domain	Measure	MOU-SLO	A	S	O	N	D	J	F	M
End User	Average Speed to Answer	<30 sec	33	22	14	22	18	26	28	47
	Call Abandon Rate	< 5%	6.1%	2.1%	0.8%	2.0%	1.5%	2.2%	2.1%	3.1%
	Email Response	<60 mins	15	16	18	16	16	18	18	25
	Voicemail Response	<30 mins	15	16	16	16	16	18	18	25
	First Call Resolution	>70%	20%	21%	61%	67%	73%	74%	77%	79%
	VITA Messaging System Availability	>99.0%	99.99%	100%	99.99%	100%	99.98%	100%	99.7%	99.8%
	Shared Messaging System Availability	>99.0%	100%	99.9%	100%	100%	99.98%	100%	100%	99.4%
Data Center	IBM Mainframe Availability	>99.9%	99.98%	100%	100%	100%	100%	100%	100%	100%
	Unisys Mainframe Availability	>99.9%	100%	99.9%	100%	100%	100%	100%	100%	100%
	UNIX Server Availability	>99%	99.82%	99.9%	99.8%	99.9%	99.9%	99.9%	99.8%	99.9%
	Windows Server Availability	>99%	99.96%	99.3%	100%	99.9%	99.4%	99.9%	99.9%	99.8%
Network	Circuits Availability	99.2%	99.5%	99.4%	99.8%	99.7%	99.7%	99.6%	99.7%	NA
Security	ACF2 Logon Requests	95%		100%	99%	100%	100%	100%	100%	100%
	Security Incident Reporting	95%		100%	100%	100%	100%	100%	100%	100%

FCR – Beginning October 2006 measure is (Resolved on First Call / Can be Resolved on First Call). Prior measure was (Resolved on First Call/Total Calls).

Field Measures

	SLO	MOU	Sep 06	Oct 06	Nov 06	Dec 06	Jan 07	Feb 07	Mar 07
End User Service	Average Speed to Answer	30 Sec		16	16	20	20	22	21
	Call Abandonment Rate	5.0%	7.0%	8.4%	9.4%	12.7%	11.0%	11.2%	12.7%
	First Call Resolution	70.0%	76.0%	79.3%	84.6%	84.7%	86.9%	87.7%	84.7%
	Average Time On-hold	90 Sec	5	4.5	5.5	5	3	5	6.5
	Help Desk Password Resets	90.0%	87.6%	94.8%	93.9%	96.8%	92.8%	98.1%	94.3%
	Service via Incident Ticket	78.0%	81.8%	82.7%	79.2%	82.6%	77.8%	79.1%	84.2%
	Service via Service Request	80.0%	86.6%	86.9%	89.7%	91.4%	90.7%	92.5%	92.9%
	Incident Repair	80.0%	84.3%	83.4%	82.6%	88.1%	86.4%	89.4%	87.3%
	Messaging Service	99.0%	99.6%	100%	99.9%	100%	99.9%	100%	100%
Data Center Service	Windows Mission Critical Servers	99.0%	99.1%	100%	100%	100%	100%	99.9%	100%
	RISC/Unix Mission Critical Servers	99.0%	100%	99.8%	100%	99.9%	100%	100%	100%
	Windows Other Server	90.0%	100%	100%	100%	100%	100%	100%	100%
	RISC/Unix Other Servers	90.0%	100%	100%	100%		100%	99.9%	100%
	QA/Test Systems and Servers	90.0%	100%	100%	100%	100%	100%	100%	100%
	Development Servers	90.0%	100%	99.9%	100%	100%	100%	100%	99.5%
Network	Internet Access	99.8%	99.5%	100.0%	100%	100%	99.9%	100%	100%

Service Delivery Incidents

Distribution of Incident Severity Jan - Mar 07

- **Since Service Commencement**
  - 33,371 incidents, 204 critical, 223 post incident reports (PIR)
  - 97 root cause analyses (RCA) opened; 78 RCAs closed
  - 273 Actions opened, 241 Actions closed

- **Significant Incidents**
  - 2/6, 6 hrs, VDEM: Disk failure caused 250 users to be without e-mail.
  - 2/28, 4 hrs, DSS & others: New logins to Unisys mainframe denied caused by "standard" rules change to the Juniper firewall which deleted 44 other rules.
  - 3/2, 8 hrs, VSP: Communication down from DGIF Game Wardens to VSP. Issue extended by trouble identifying problem circuit and lack of internal escalation.
  - 3/2, 87 hrs, DMV: Gloucester CSC disk array failure on Friday after close of business. HW fixed, but no backup existed for that site. Rebuilt database and opened noon Tuesday 3/6.
  - 3/13&14, 25 hrs, VDH: Two circuit outages caused by separate HW failures. After repairs, circuits continued to be monitored by Verizon.

Percent Critical Tickets

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Transformation

Messaging Services

Enterprise Exchange/Outlook Email
Enterprise Collaboration Tools
Active Directory, DNS
$25M Investment

Desktop

Mass Desktop Refresh Projects
Network Printer Consolidation and Refresh
Enterprise Desktop Management Systems
$35M Investment

Help Desk

Enterprise Help Desk in Russell and Chesterfield
Field Based Agents and Technicians for Level 3
Enterprise Help Desk System (Peregrine)
$10M Investment

Mainframe and Servers

New IBM and Unisys Mainframes
Consolidation and Refresh of Servers
Migration of servers to the Data Center
$50M Investment

Transformation

People – Process – Tools
Reliable, High Performance,
Enterprise-Wide IT Infrastructure
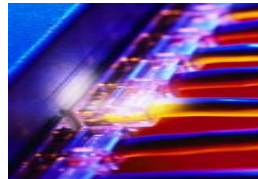**$270 Million Investment**

Security

Enterprise Security Operations Center
Computer Security Incident Response Center
Secure Internet Gateway
$10M Investment

Facilities Tier 3 and Tier 2

New Data Center/Office Building in Chesterfield
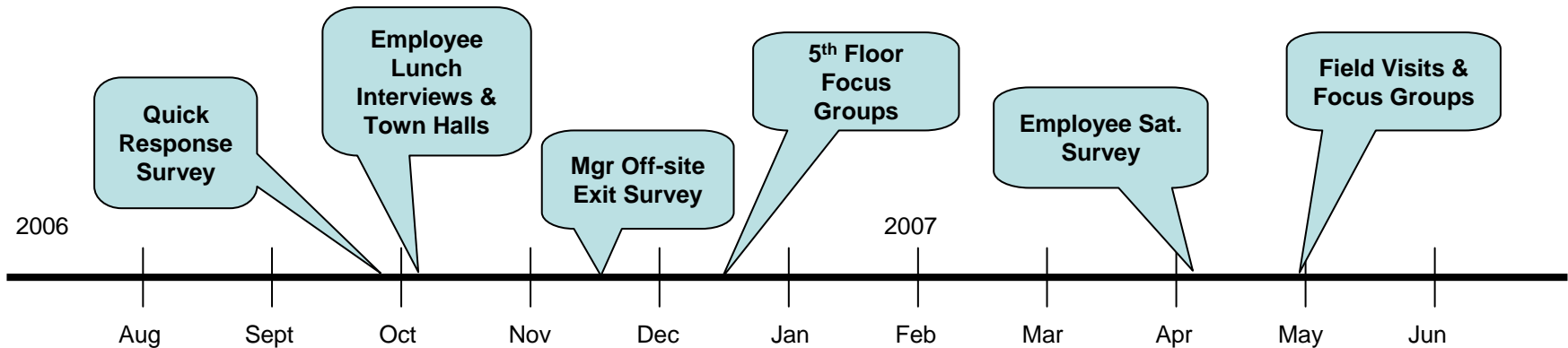New Disaster Recovery Center and Help Desk
in Russell County
$60M Investment

Network

New Commonwealth-wide MPLS Core WAN
LAN upgrades to Local Switches/Routers as Needed
Network Re-addressing of IP, DHCP
**$60M Investment**

Voice / Video

Voice over IP Network Optimized for
Voice and Video Traffic
$20M Investment

Supporting Employees through the Change

Timeline (2006–2007):

- **Quick Response Survey** — Aug
- **Employee Lunch Interviews & Town Halls** — Oct
- **Mgr Off-site Exit Survey** — Dec
- **5th Floor Focus Groups** — Jan
- **Employee Sat. Survey** — Apr
- **Field Visits & Focus Groups** — May

Months: Aug, Sept, Oct, Nov, Dec, Jan, Feb, Mar, Apr, May, Jun

What We Learned

- Managers
  - 66% are comfortable explaining transformation
  - 53% understand impacts of transformation on customers
  - 41% understand impacts on their team
- Employees
  - 50% expect jobs to change in 6 months
  - Identify strongly with parent agencies
  - Want to hear from managers
  - Desire more training, support, and better understanding of how they fit within the Partnership
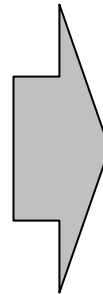
Targeted Activity

- Field visits and focus groups
- Manager teleconferences and talking points
- Change Champions Expansion
- "Act for Success"
- Procurement Working Group
- Program leadership off-site

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October 2006 quick response survey identifies concerns however attrition is better than benchmark
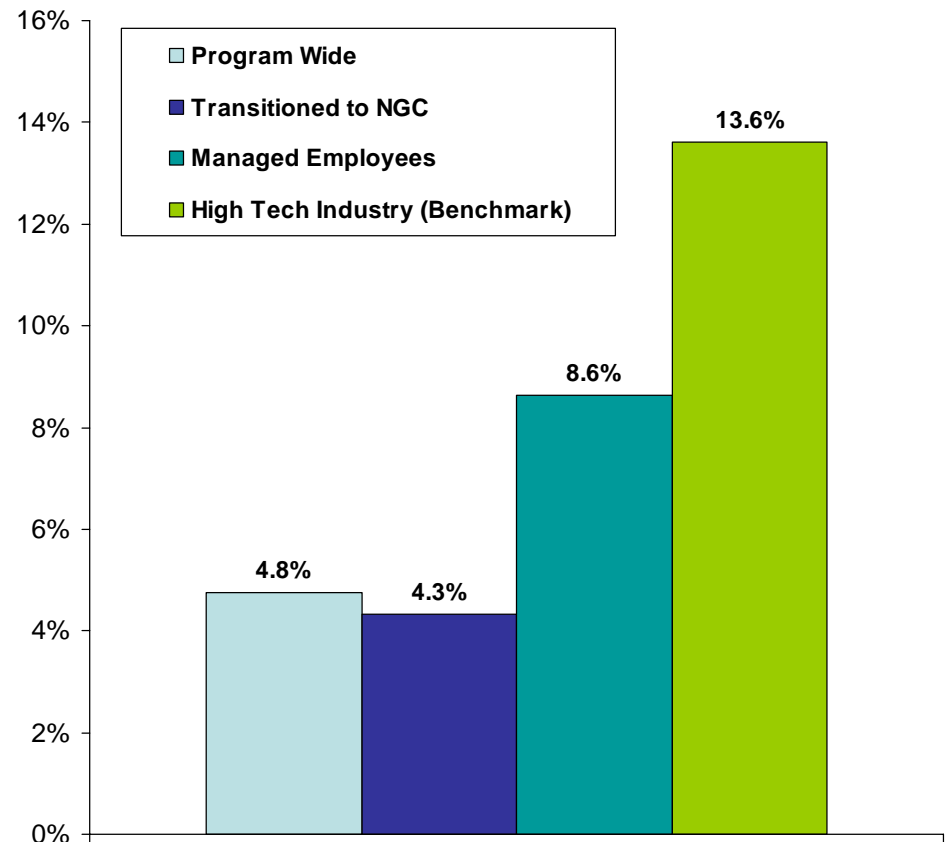
Top Concerns

- Procurement processes too slow
- Need more transformation info and timelines to support customers
- Want training and support to do well and retain jobs
- Don't understand where they fit in the org structure
- Fear for job security after 1 year date
- Regionalization may hurt ability to serve customers
- "Us" vs. "them" attitude impacts teamwork and performance

46% survey participation rate
- – 391 of 849 SD employees
- – 52% among transitioned to NG
- – 34% among Managed employees

Controllable Attrition

Legend:
- Program Wide
- Transitioned to NGC
- Managed Employees
- High Tech Industry (Benchmark)

- Program Wide: 4.8%
- Transitioned to NGC: 4.3%
- Managed Employees: 8.6%
- High Tech Industry (Benchmark): 13.6%

2006   **2007**   **2008**   **2009+**

months | J A S O N D | J F M A M J J A S O N D | J F M A M J J A S O N D | J F M A

Domains — Transformation Phase (36 Months to June 2009)

General
- Service Commencement Date 7/1/06
- Process Cutover (Internal Apps)
- Procedures Manual (10/1/06)
- Procedures Manual Plan (8/1/06)
- ITIL Process Optimization Complete SCD+23 (6/1/08)
- DR Test at SWESC SCD+22 (5/1/08)

EUS

Help Desk
- Knowledge Mgt. System Operational P10/1/06-A4/01/07
- Incident Mgt. Web Accessible (8/1/06)
- Production Incident Mgt System / SPOC Help Desk (SWESC) SCD+24 (7/1/08)

Desktop
- Begin Desktop Refresh (P3/01/07-A3/15/07)
- Desktop & asset mgmt system operational (P1/1/07-A1/29/07)
- Complete Desktop Refresh SCD+32 (3/1/09)

Messaging
- Single Statewide Address List SCD+9 (P4/1/07-A3/22/07)
- DNS / WINS Infrastructure SCD+13 (8/1/07)
- Enterprise messaging 90% complete SCD+ 35 (6/1/09)

DCS

Facilities
- CESC Ready for Occupancy SCD+12 (7/1/07)
- SWESC Ready For Occupancy SCD+16 (11/1/07)
- RPB Migration Complete SCD+19 (2/1/08)

Mainframe / Server
- Infrastructure Ops Center (Interim) 11/1/06
- Mainframe / server workload migration from RPB to CESC SCD+18 (1/1/08)
- Server Consolidation 90% Complete SCD+35 (6/1/09)

NVS

Data Network
- Temp. NOC (11/1/06)
- MPLS Core Complete SCD+14 (9/1/07)
- Enterprise NOC SCD+16 (11/1/07)
- Complete Agency LAN migration (90%)SCD+30 (1/1/09)
- Arch Network Blueprint Addressing Plan (2/1/07)

Voice
- VoIP Architecture Design And Recommendations SCD+9 (4/1/07)
- VoIP Completion (90%) SCD+63 10/01/11

SS

Security
- Interim Security Incident tracking and Mgt System SCD+3 (10/1/06)
- Enterprise Vulnerability Assessment Program Operational SCD+20 (3/1/08)
- CSIRC Complete SCD+20 (3/1/08)
- ESOC Complete SCD+23 (6/1/08)

SCD +6 +12 +18 +24 +30

▽ = Delivered   ▽ = Delivered, awaiting final VITA acceptance   ▽ **= Delayed**

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Service Area	Technology Domain	Q1 07	Q2 07	Q3 07
End User Services	Help Desk	Peregrine "go live" VCCC(3/14) ▼ Peregrine "go live" Early Adopters ▼ Knowledge Mgmt System ▼ ▽Peregrine "go live" Phase 1 sites		
	Desktop	▼ Desktop & asset mgmt system operational (1/29) Begin Desktop Refresh (3/15) ▼ Qtr 1 Desktop Refresh (4/1) ▽	Qtr 2 Desktop Refresh (7/1) ▽	Qtr 3 Desktop Refresh (10/1) ▽
	Messaging		Standup Messaging BackEnd (7/30) ▽	Begin Messaging Refresh 10/1 ▽
Data Center Services	Facilities		CESC Ready for Occupancy (7/1/07) ▽	
	Mainframe and Server		RPB Server consolidation in-place complete (5/15/07) ▽	
Network Services	Data	▼ Arch Network Blueprint Addressing Plan (2/1/07)	Connectivity to CESC (7/1/07) ▽	MPLS Core Complete ▽ SCD+14 (9/1/07) 15% LAN Migration ▽ SCD+15 (10/1/07)
	Voice			
Security Services	Security		ESOC System detailed Design (6/1/07) ▽ CSIRC System Detailed Design (5/15/07) ▽	VITA security Dashboard (09/10/07) ▽
General Services	Internal Apps	Standup Clearcase CMMI (2/20/07) ▼ ▽ Transition Dev Process to CMMI Level 3 (3/22/07)		
	Cross Functional		▽ Change Management "go live"	

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Transformation Dashboard
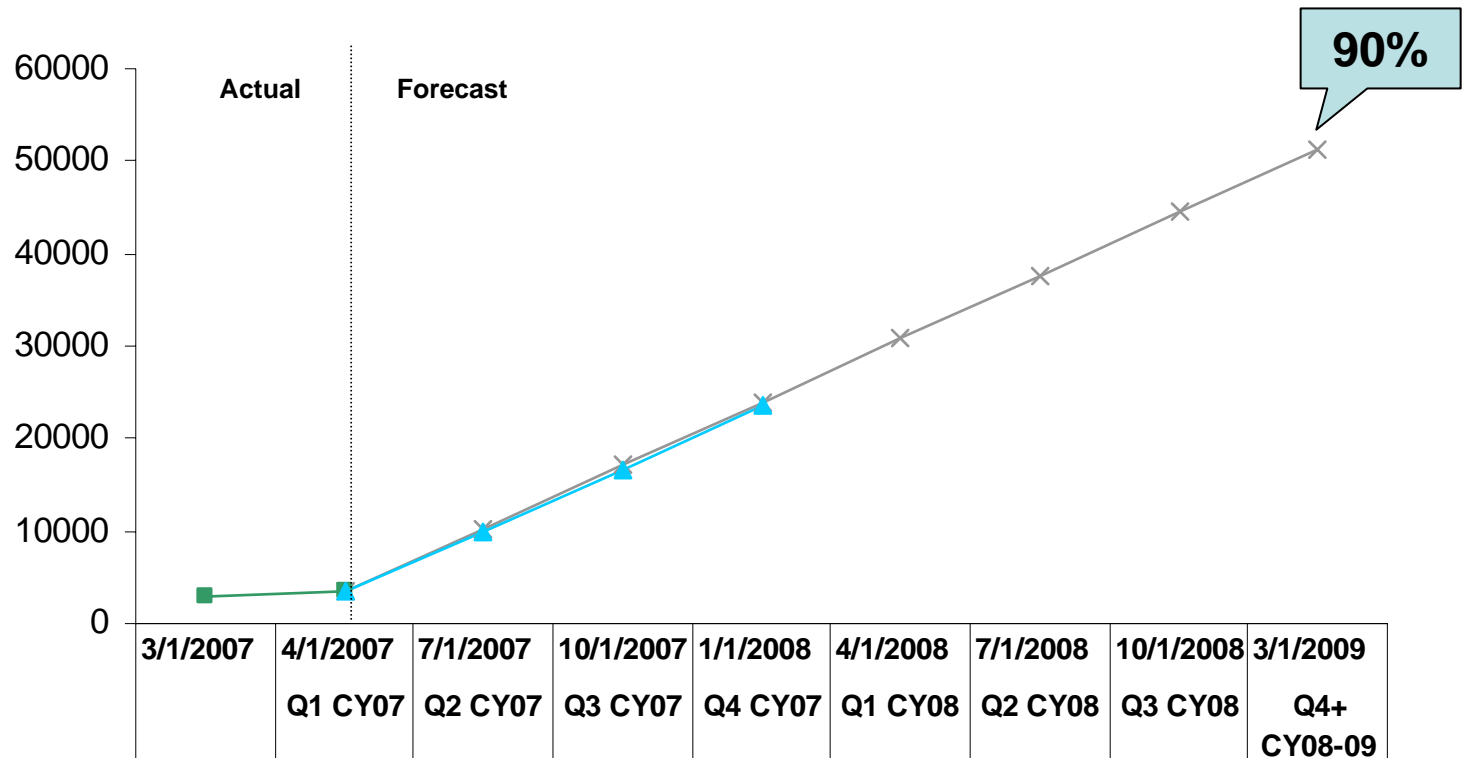
EUS	**Desktop**	1) Delayed desktop refresh start and slower initial run rate. Project catch-up by year-end. 2) Desktop and asset management system (Altiris) implementation and rollout delayed. 4/30 target for approval of Acceptance Criteria and Test Plan results.
	Helpdesk	1) Delay in migrating VCCC and DMHMRSAS to Peregrine. VCCC migration completed 3/14. DMHMRSAS pilots completed at 5 sites. Deployment schedule for Phase 1 sites finalized. Planning beyond Phase 1 to achieve desired run rate by 3rd quarter. 2) Knowledge Management delivered, undergoing post-live production test. Expect completion 4/30.
	Messaging	1) GAL Synch complete. 2) Back End Infrastructure for Enterprise Messaging planning in progress. 3) Developing agency pilot and schedule for migration.
DCS	**Server**	1) Resolved issues with server virtualization tools that delayed RPB consolidation. Production environment testing complete. RPB consolidation scheduled for completion 5/15/07. 2) HPOV agent installations continue for agencies in the Early Adopters program.
	Mainframe	1) DMV has tentatively agreed to host a mainframe print center to support all agencies located in the greater Richmond area. 2) RPB to CESC mainframe processing migration plan outline developed and work task details are being incorporated into the outline.
	Facilities	CESC on schedule. SWESC on schedule.
NWS	**Data Network**	Developing communication packages and addressing agency policy on staggering implementation over an extended period of time.
	Voice Network	Awaiting business decision on VoIP Engineering Change Proposal (ECP) for CESC.
	Security	All security projects are on schedule.
	Internal Apps	1) Chargeback study on-hold awaiting briefing on proposed "managed services". 2) CMMI efforts are slightly behind schedule (~3 weeks).

Transformation Rollout Overview

- Desktop Refresh

  – Pilot agencies for desktop refresh complete

  – Desktop refresh for 3 public safety agencies has begun

- Help Desk

  – Incident Management tool (Peregrine) "go live" at VCCC and DMHMRSAS

- Messaging

  – GAL (Global Address List) consolidation complete

- Server Consolidation

  – RPB in progress

- Network Refresh
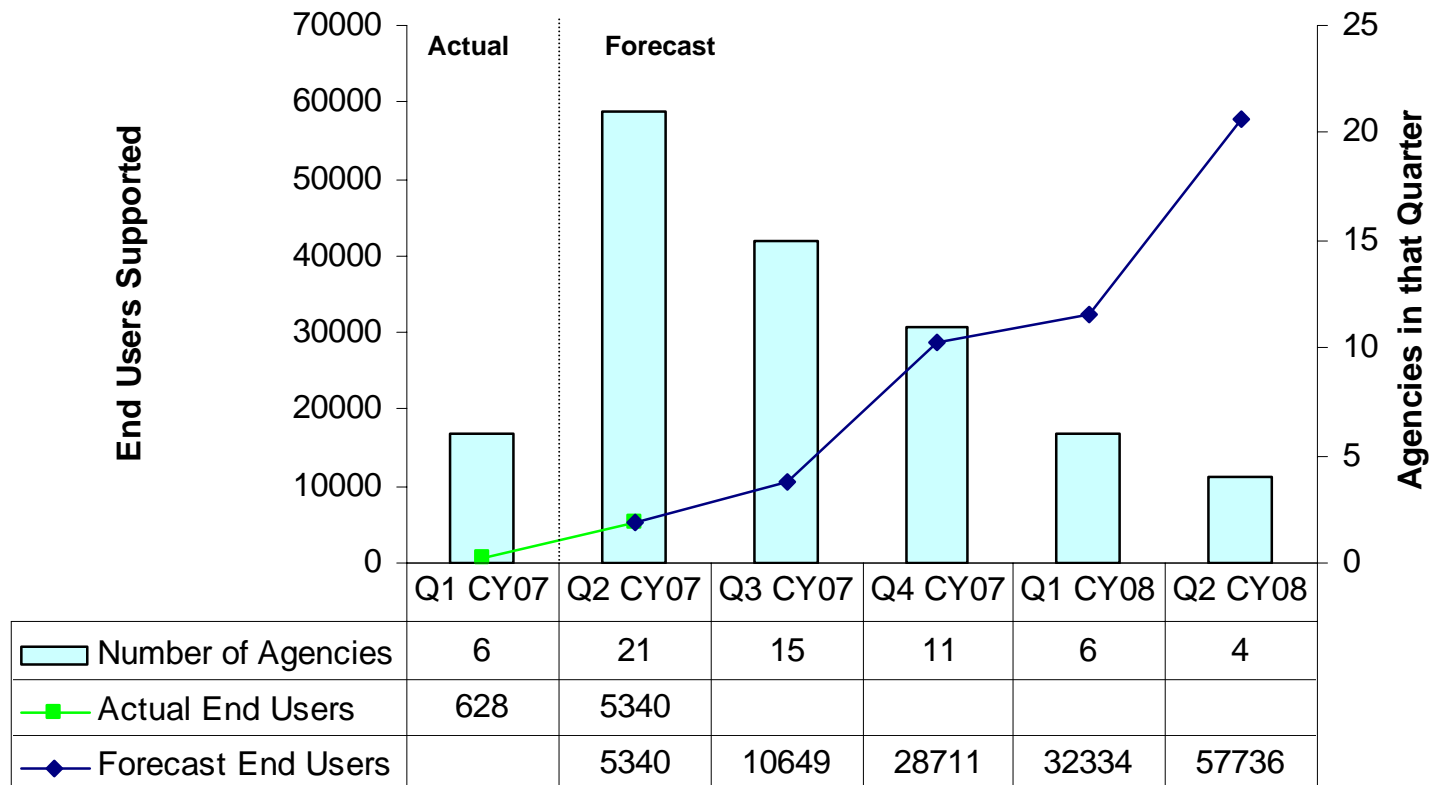
  – Approach and notional socialized

Desktop Refresh

Cumulative Count

	3/1/2007	4/1/2007 Q1 CY07	7/1/2007 Q2 CY07	10/1/2007 Q3 CY07	1/1/2008 Q4 CY07	4/1/2008 Q1 CY08	7/1/2008 Q2 CY08	10/1/2008 Q3 CY08	3/1/2009 Q4+ CY08-09
Revised Baseline		3487	10318	17149	23980	30811	37642	44473	51304
Actuals	2852	3487							
Scheduled		3487	9784	16684	23584				

90%

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Help Desk

**Peregrine Rollout
(Incident Management Tool)**

	Q1 CY07	Q2 CY07	Q3 CY07	Q4 CY07	Q1 CY08	Q2 CY08
Number of Agencies	6	21	15	11	6	4
Actual End Users	628	5340				
Forecast End Users		5340	10649	28711	32334	57736

Messaging

Exchange End User Migration Approach

	Q4 CY07	Q1 CY08	Q2 CY08	Q3 CY08	Q4 CY08	Q1 CY09	Q2 CY09
◆ Planned	0	1500	6000	16000	33000	50000	65000
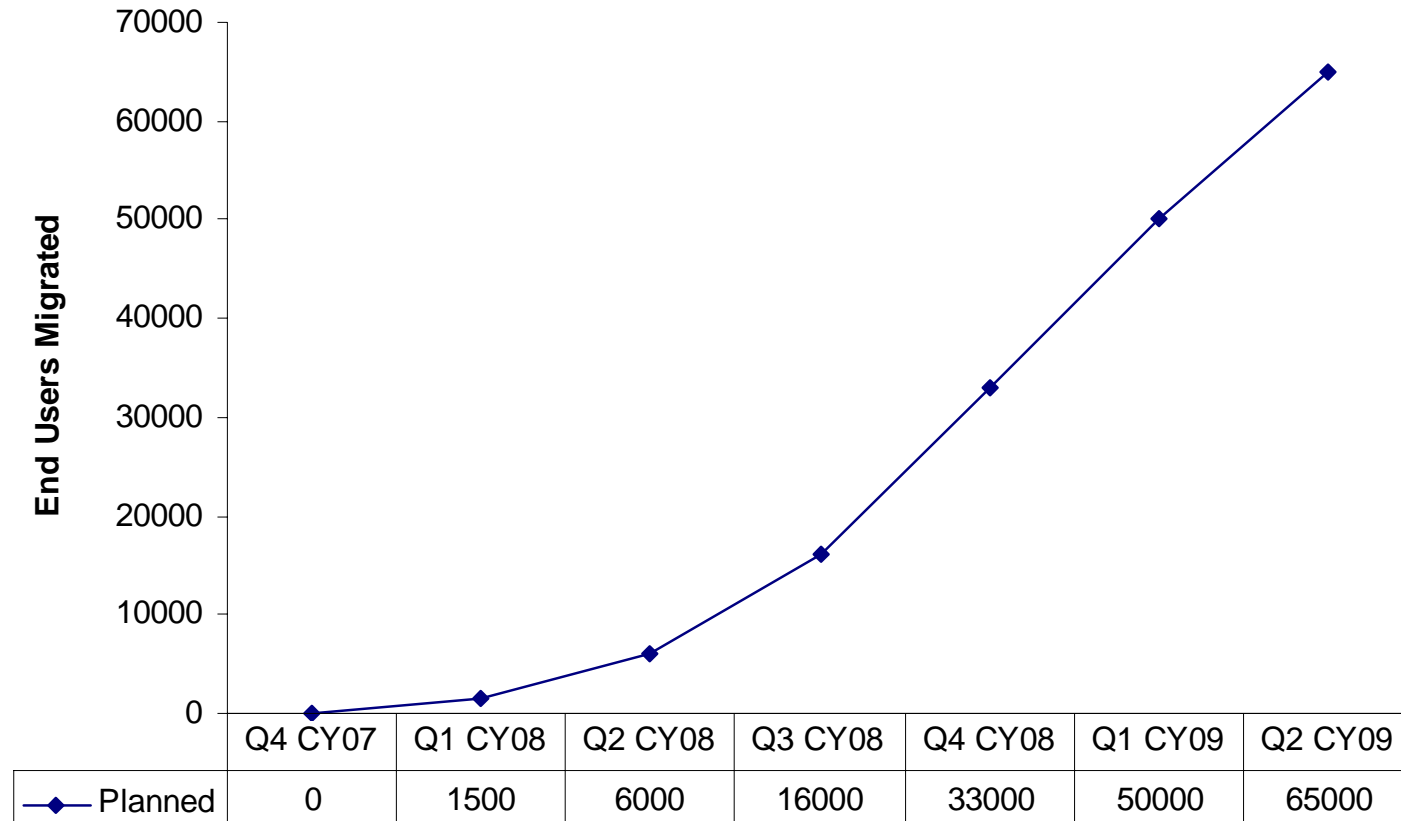
Server Consolidation

Phase 1: RPB	Phase 2: Greater Richmond	Phase 3: Enterprise

Actual   **Forecast**

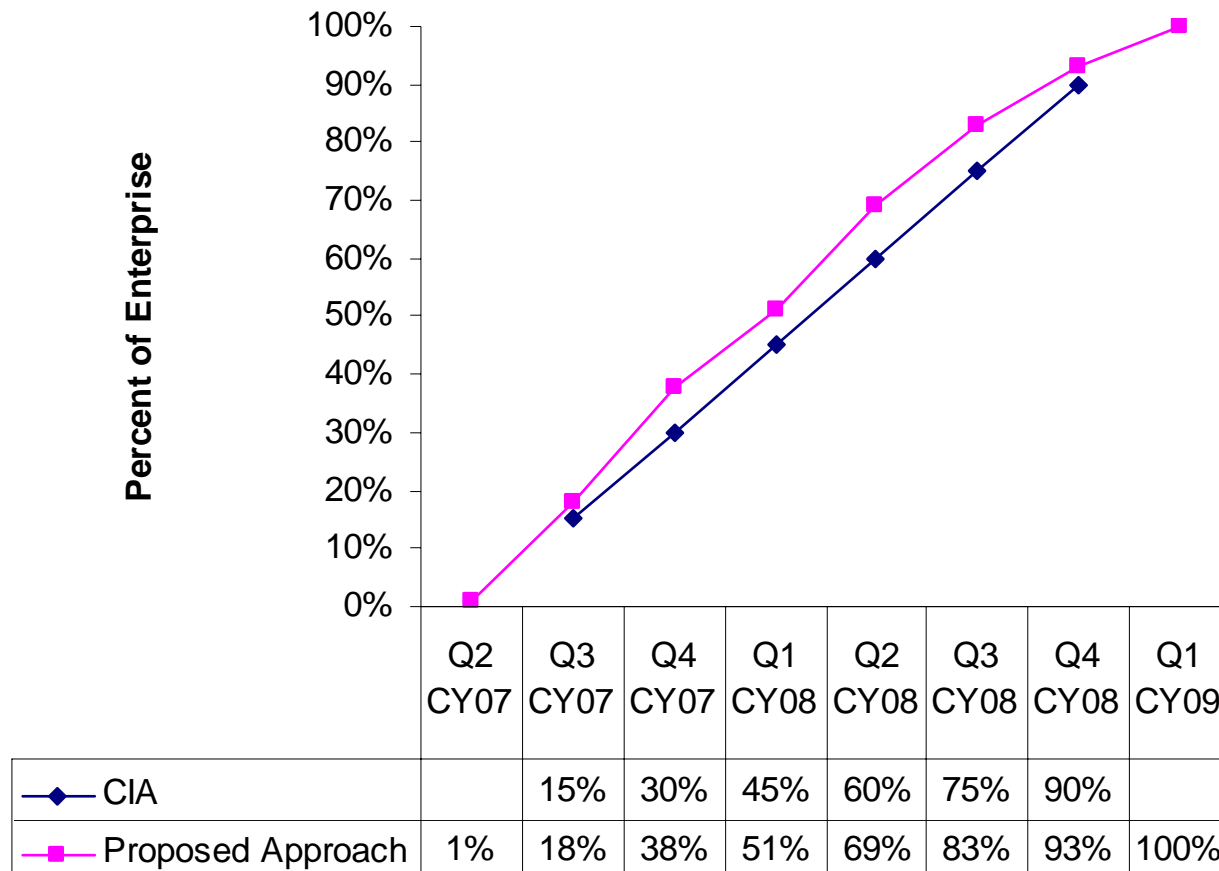|	Q4 CY06	Q1 CY07	Q2 CY07	Post-CESC move
Baseline Sched	0	250	594	
Actual	0	49		
Forecast		49	247	415

- To be addressed — 179
- Agency constraints — 168
- On track — 247
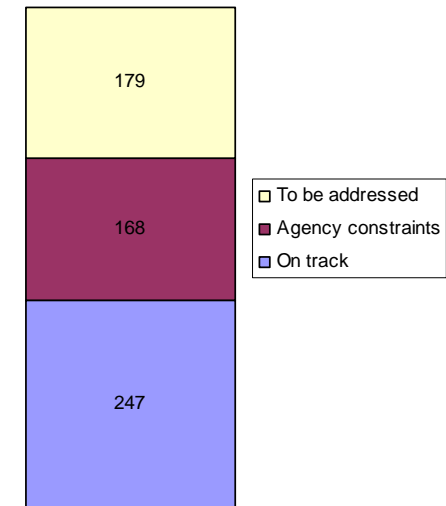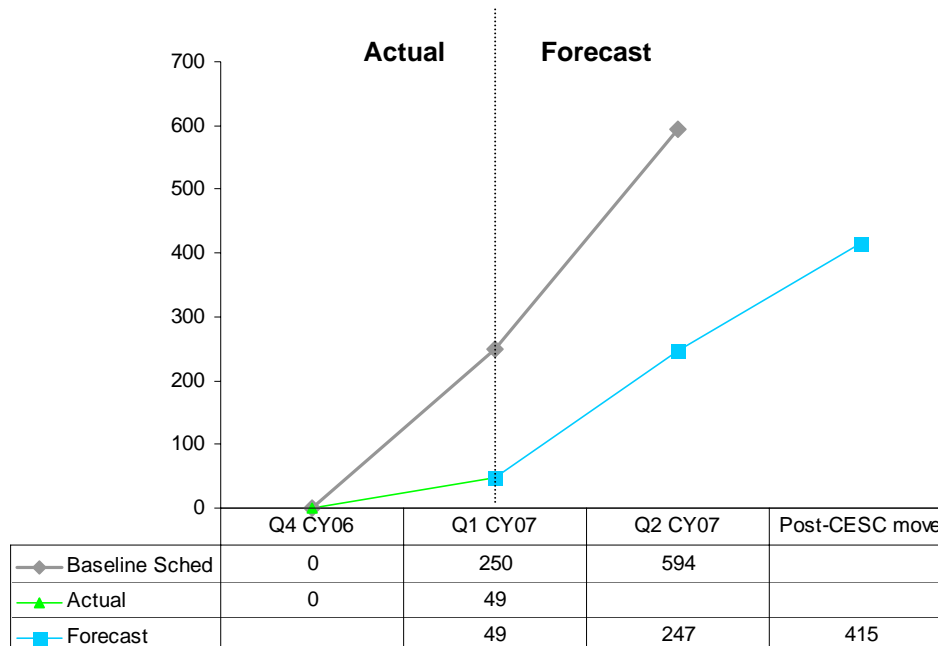
- Available target servers impacted by:
  - Federal funding connection
  - "DMZ" for security
  - Compatibility discovered after further analysis
- Beginning consolidation delayed and slower rate due to:
  - Server rack dropped at delivery to RPB
  - Virtualization toolset (VM Ware) performance in the production pilot and environment versus lab
  - Accommodation for certain agency constraints (e.g. Tax)

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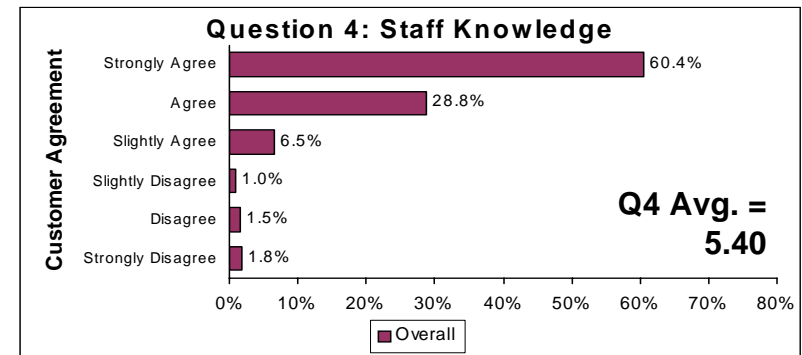
Network Refresh

Notional MPLS Network Rollout

	Q2 CY07	Q3 CY07	Q4 CY07	Q1 CY08	Q2 CY08	Q3 CY08	Q4 CY08	Q1 CY09
CIA		15%	30%	45%	60%	75%	90%	
Proposed Approach	1%	18%	38%	51%	69%	83%	93%	100%

PC Ports as proxy for percentage of enterprise - more conservative given servers and other network dependent devices picked up as agencies and their corresponding PC ports are converted
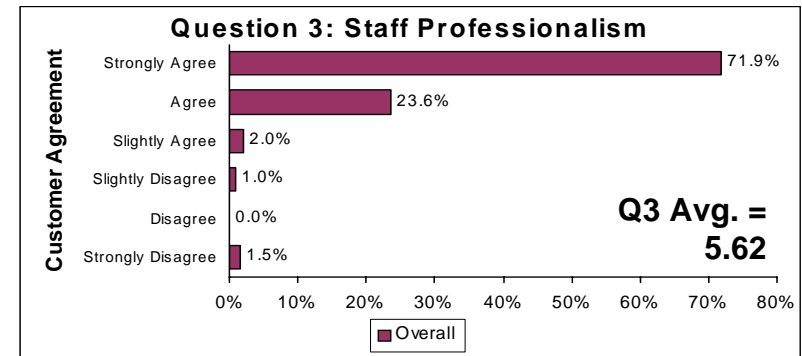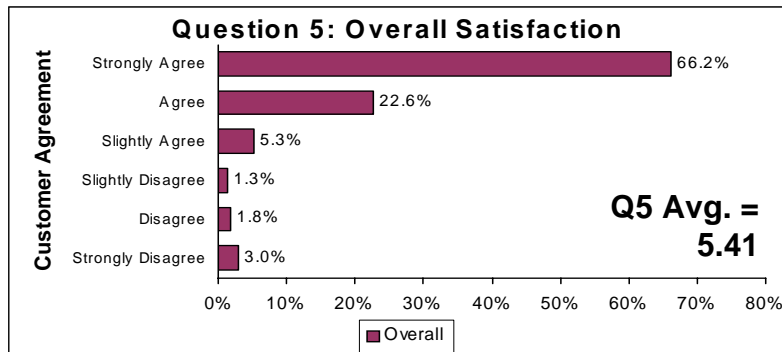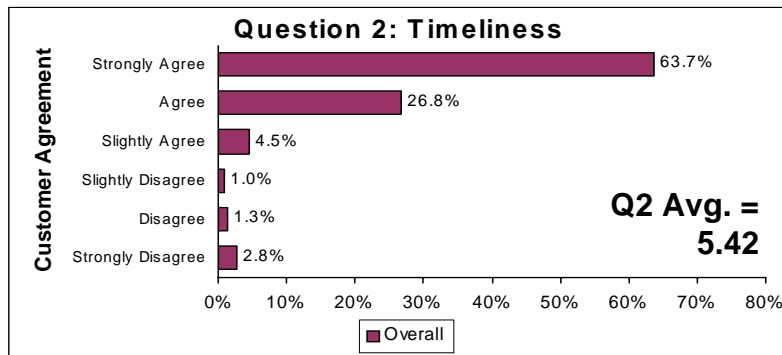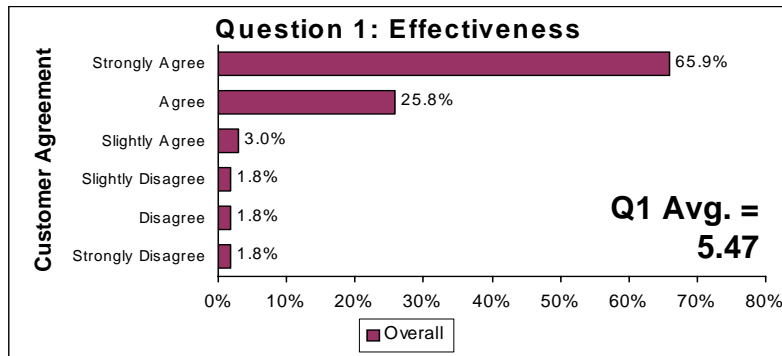
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Transformation Challenges

- Desktop refresh & incident management – startup delays will require faster refresh rate and help desk implementation

- Delay in RPB server consolidation – does not impact move to CESC; Federal funding exclusions need to be addressed

- Data center moves (mainframe and server) for RPB and subsequent agencies and sites will require close coordination with customer agencies' applications owners

- Communications issues in initial deployment activities demonstrate need for tailored communications to each agency as a critical success factor for all transformation activities

Customer Satisfaction

Partnership continues to reinforce importance of customer satisfaction and customer service mind-set

- Measuring and improving service delivery
  - Developing targeted service-based surveys
  - Engaging service delivery employees

- Improving Request for Service (RFS) and Procure to Pay (P2P) processes

- Actively engaging customers
  - Monthly Partnership Advisory Council meetings
  - Procurement Working Group meeting on bi-weekly basis
  - Customer Account Teams are being formed and will meet on a bi-weekly basis beginning this month

Customer satisfaction with help desk services is very high; focus on increasing survey response rate

Question 1: Effectiveness (Q1 Avg. = 5.47)
- Strongly Agree: 65.9%
- Agree: 25.8%
- Slightly Agree: 3.0%
- Slightly Disagree: 1.8%
- Disagree: 1.8%
- Strongly Disagree: 1.8%

Question 2: Timeliness (Q2 Avg. = 5.42)
- Strongly Agree: 63.7%
- Agree: 26.8%
- Slightly Agree: 4.5%
- Slightly Disagree: 1.0%
- Disagree: 1.3%
- Strongly Disagree: 2.8%

Question 3: Staff Professionalism (Q3 Avg. = 5.62)
- Strongly Agree: 71.9%
- Agree: 23.6%
- Slightly Agree: 2.0%
- Slightly Disagree: 1.0%
- Disagree: 0.0%
- Strongly Disagree: 1.5%

Question 4: Staff Knowledge (Q4 Avg. = 5.40)
- Strongly Agree: 60.4%
- Agree: 28.8%
- Slightly Agree: 6.5%
- Slightly Disagree: 1.0%
- Disagree: 1.5%
- Strongly Disagree: 1.8%

Question 5: Overall Satisfaction (Q5 Avg. = 5.41)
- Strongly Agree: 66.2%
- Agree: 22.6%
- Slightly Agree: 5.3%
- Slightly Disagree: 1.3%
- Disagree: 1.8%
- Strongly Disagree: 3.0%

- **Period of Analysis: 02/09/07 – 03/30/07**
- **Number of Responses = 398**
- **Number of Resolved Tickets = 10,496**
- **Response Rate: 3.8%**

Request for Service (RFS) Process Monthly Totals

- RFS is new "project" work, incremental to the contract, such as:
  - Providing infrastructure in a new Commonwealth facility or supporting an agency move
  - Standing up infrastructure to support a new information system

- RFS requests increased exponentially last quarter; projected to grow
  - Changes to state and federal laws, regulations
  - Response to security and audit findings
  - Year-end discretionary spend
  - Customer service enhancements

Status	Jul-Dec 2006	Jan 2007	Feb 2007	Mar 2007	Totals
RFS Requests Received	26	5	6	16	53
Cancelled RFS Requests	10	2	0	1	13
Total:	16	3	6	15	40

RFS Requests processed as of July 2006 – March 2007

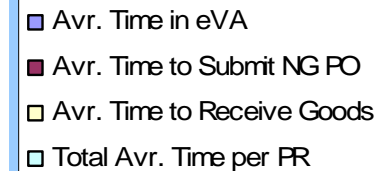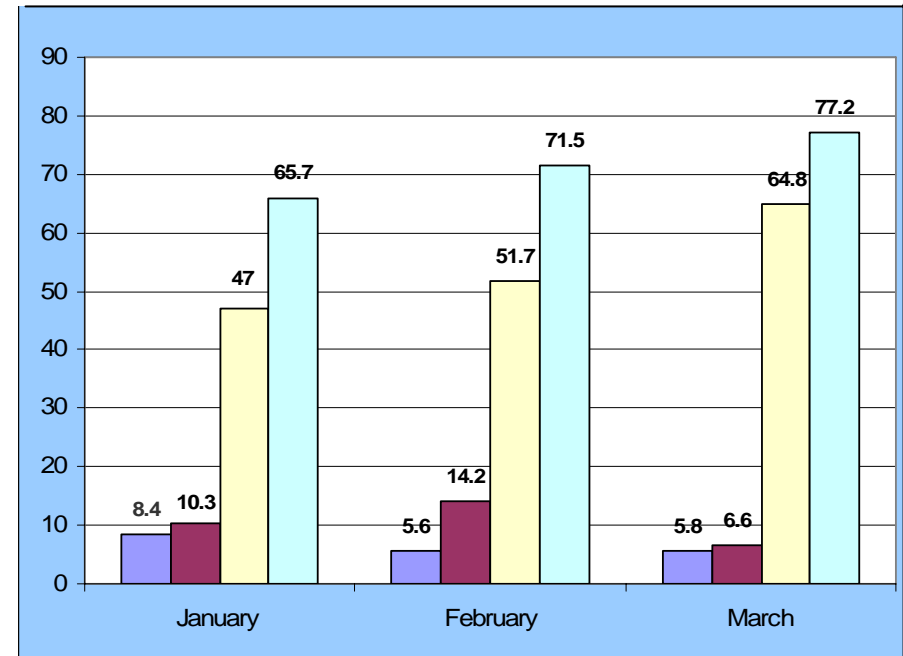| Status	Totals	Total Value
Total RFS Requests	**40**	
Proposals in development	10	
Proposals submitted to customer	30	$6.7M
Total RFS Proposals	**30**	**$6.7M**
Proposals under review by customer	11	$1.9M
Proposals authorized to proceed	19	$4.8M
Total RFS Projects	**19**	**$4.8M**
RFS projects in progress	9	$0.6M
RFS projects completed	10	$4.2M
Total RFS Invoicing	**10**	**$4.2M**

Procure to Pay (P2P) Process Monthly Totals

- P2P is a transactional process for acquiring goods and services, such as:
  - Ordering a new PC for a new employee
  - Ordering maintenance on a router

- P2P transactions can be in-scope to the contract or incremental

- Volume increased this quarter; expected to spike next quarter
  - Year-end discretionary spend

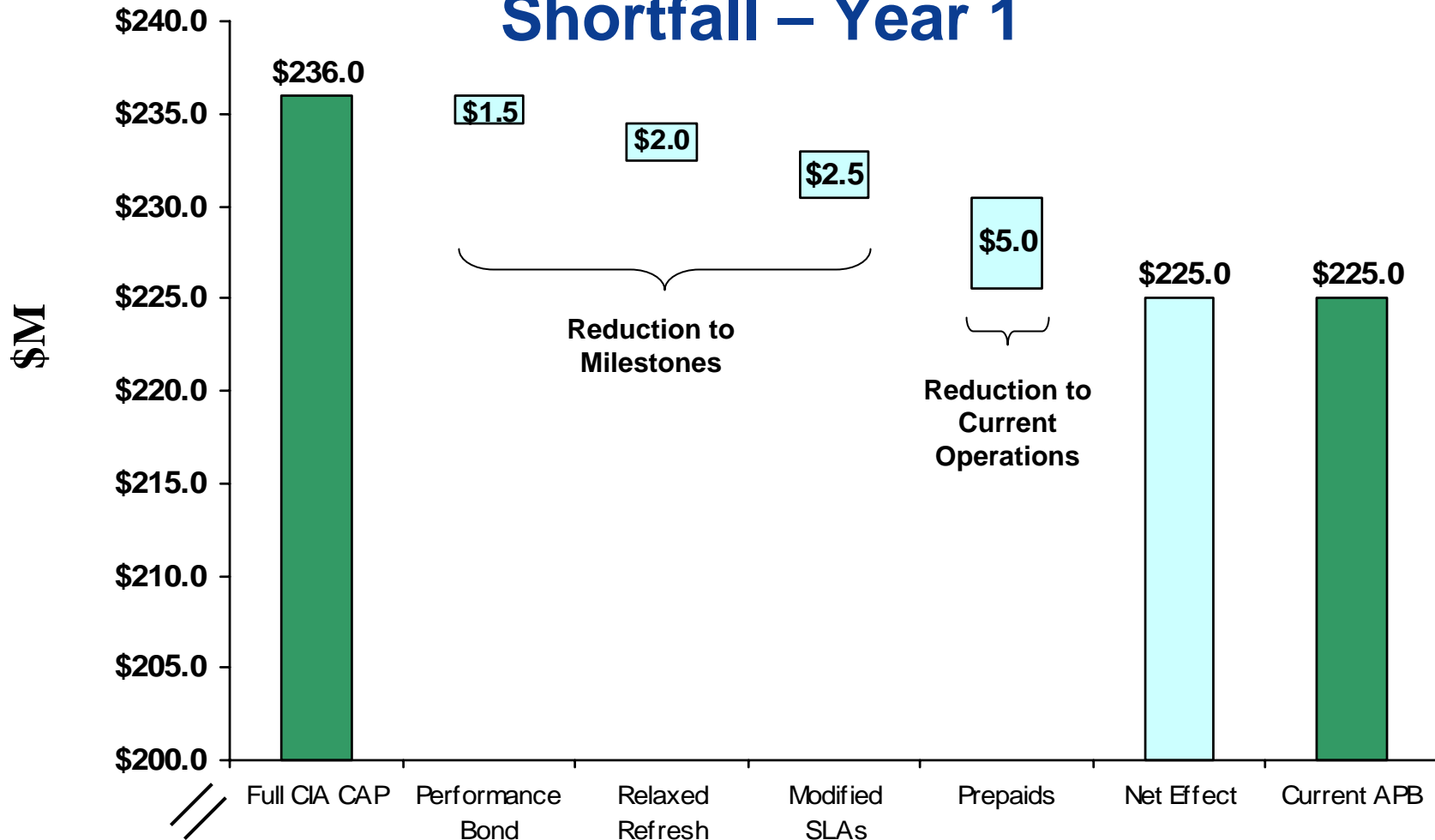| P2P Transactions	Jul-Dec 2006	Jan 2007	Feb 2007	Mar 2007	Totals
P2P Transactions	1,754	329	343	308	2,734
Average # per day	14.6	17.3	18.1	14.0	N/A

P2P processing time from request to closeout of receiving

- Metrics available for first time this quarter to provide better visibility into bottlenecks

- "Average time to receive goods" shows when the receiving "paperwork" completed, not when good arrives

- Despite 33% reduction in time from customer request to PO, overall process taking too long

- The Partnership is taking the following actions to improve speed

  – Adding personnel

  – Addressing process bottlenecks

  – Accelerating online service catalog for standard commodities

Legend:
- Avr. Time in eVA
- Avr. Time to Submit NG PO
- Avr. Time to Receive Goods
- Total Avr. Time per PR

January: 8.4, 10.3, 47, 65.7
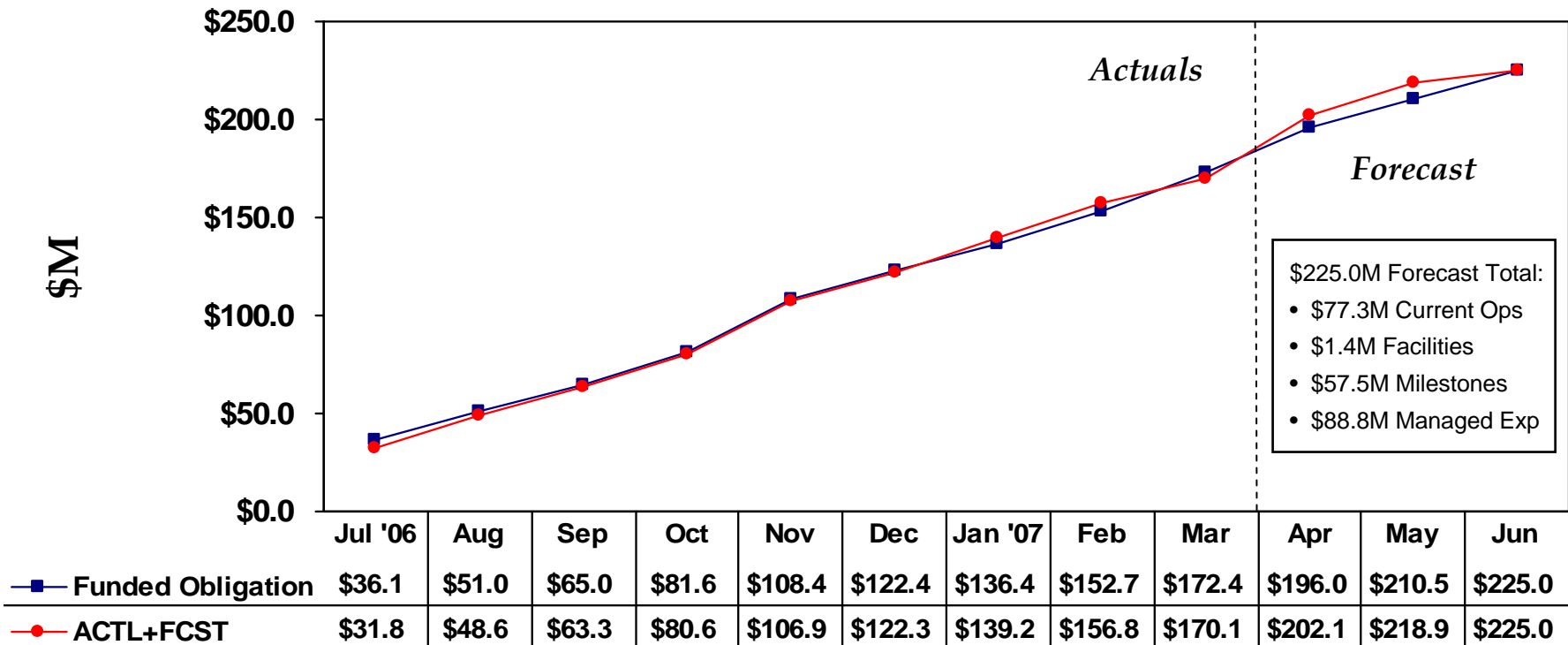February: 5.6, 14.2, 51.7, 71.5
March: 5.8, 6.6, 64.8, 77.2

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ITP Financials

Contract Modifications to Address Revenue Shortfall – Year 1

Partnership Budget and Forecast – Year 1

Actuals

Forecast

$225.0M Forecast Total:
- $77.3M Current Ops
- $1.4M Facilities
- $57.5M Milestones
- $88.8M Managed Exp

$M

	Jul '06	Aug	Sep	Oct	Nov	Dec	Jan '07	Feb	Mar	Apr	May	Jun
Funded Obligation	$36.1	$51.0	$65.0	$81.6	$108.4	$122.4	$136.4	$152.7	$172.4	$196.0	$210.5	$225.0
ACTL+FCST	$31.8	$48.6	$63.3	$80.6	$106.9	$122.3	$139.2	$156.8	$170.1	$202.1	$218.9	$225.0

➢ Cumulative Expenses through March are tracking closely to the budget; this is largely due to the delay of several Milestones

➢ $57.5M for Milestones based on NG's proposed schedule, which includes Performance Bond, Relaxed Refresh and Service Level Agreement (Help Desk & Messaging) adjustments

Independent Verification & Validation

Independent Verification and Validation (IV&V)

- To date CACI has completed 2 of 4 currently scheduled assessments

  – July and November 2006 with net 192 positive findings and 115 minor negative findings – no major negative findings relative to program best practices

  – 62% minor negative finding closure rate since initial assessment

  – Remaining assessments scheduled for May and November, respectively

- ITP has executed recommendation regarding ITP Program Governance Council

  – Focus on scope, timing and targets relative to best practices for program management maturation

  – Balance demands of tactical program performance, management and best practices

  – Determine mid and long-term focus for program IV&V